

# The *dN $\alpha$ -Optimus Prime*

*Stereo Dual Delay Effect*

*High Quality DSP Plugin for  
the Sonic Core Scope Platform*

## dNa – Digital&Analog

*DSP Plugins for Sonic Core Scope platform*

*Effects processor combining the finest  
technology for creating echo / delays,  
chorusing, flanging, phasing, dub-echo's, and  
many other creative and weird sounds.*

*Inspired by a legend!*



## **Preface:**

Thank you for purchasing the dNa-Optimus Prime. I can only hope it will bring lots of joy and creativity to your musical endeavor.

dNa has come a long way in developing plugins for the Scope Platform; main goal was always trying to create essential and intuitive plugins, which combine the best of my analog and digital experiences into the dNa products. This hopefully sets a new benchmark in what one can do with the platform; expanding the possibilities for it in being a true high-end multi effects unit which just gives you inspiration in making music.

One thing is for sure, I am very proud of this addition to the growing catalog of dNa plugins. And...I am very grateful for the users supporting dNa and Sonic Core in keeping Scope alive.

A special thanks goes out to the PlanetZ, Hitfoundry, OSS and FB friends and supporters with whom I've always had very nice personal contact with. Sorry i won't name you all, since I couldn't forgive myself if I forgot one of you, you know who you are! But one person in particular I have to name: Holger for making and keeping it all possible after all these years, and for being a good friend.

Sincerely,

Ray

## Overall functions(upper-right):



*Midi-functions:* select channel / show midi input.

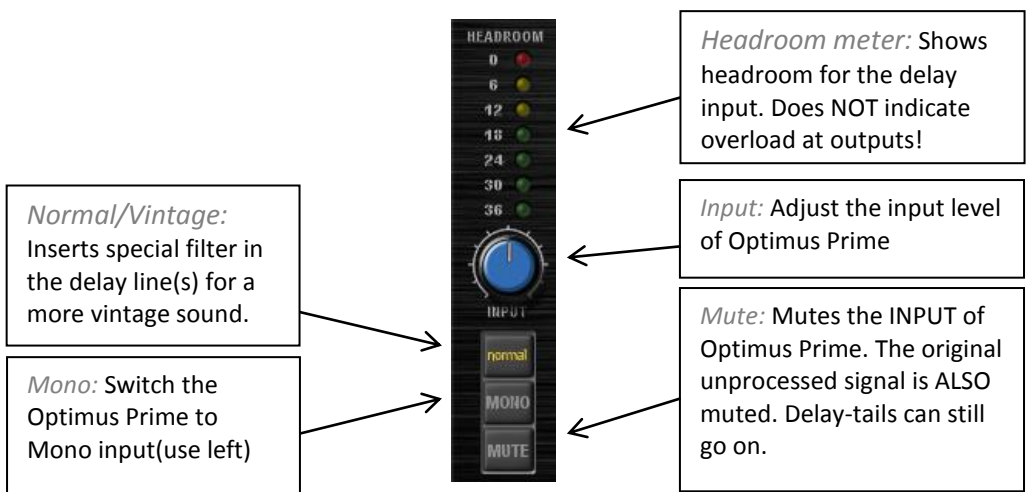
*Bypass:* True bypass of Optimus Prime, delay-output will also be bypassed. (muting the delay-tails instantly) **BYPASSED** will start blinking GREEN just above the display window.

*Presets:* show preset window.

*Stay-on-top:* Let's the window stay on top.

*Close:* Close the dNa-Optimus Prime window.

## Controllers and indicator FAR LEFT:



## Setup / Screens / Indication:

When no delay is activated yet, you'll see the below message on-screen

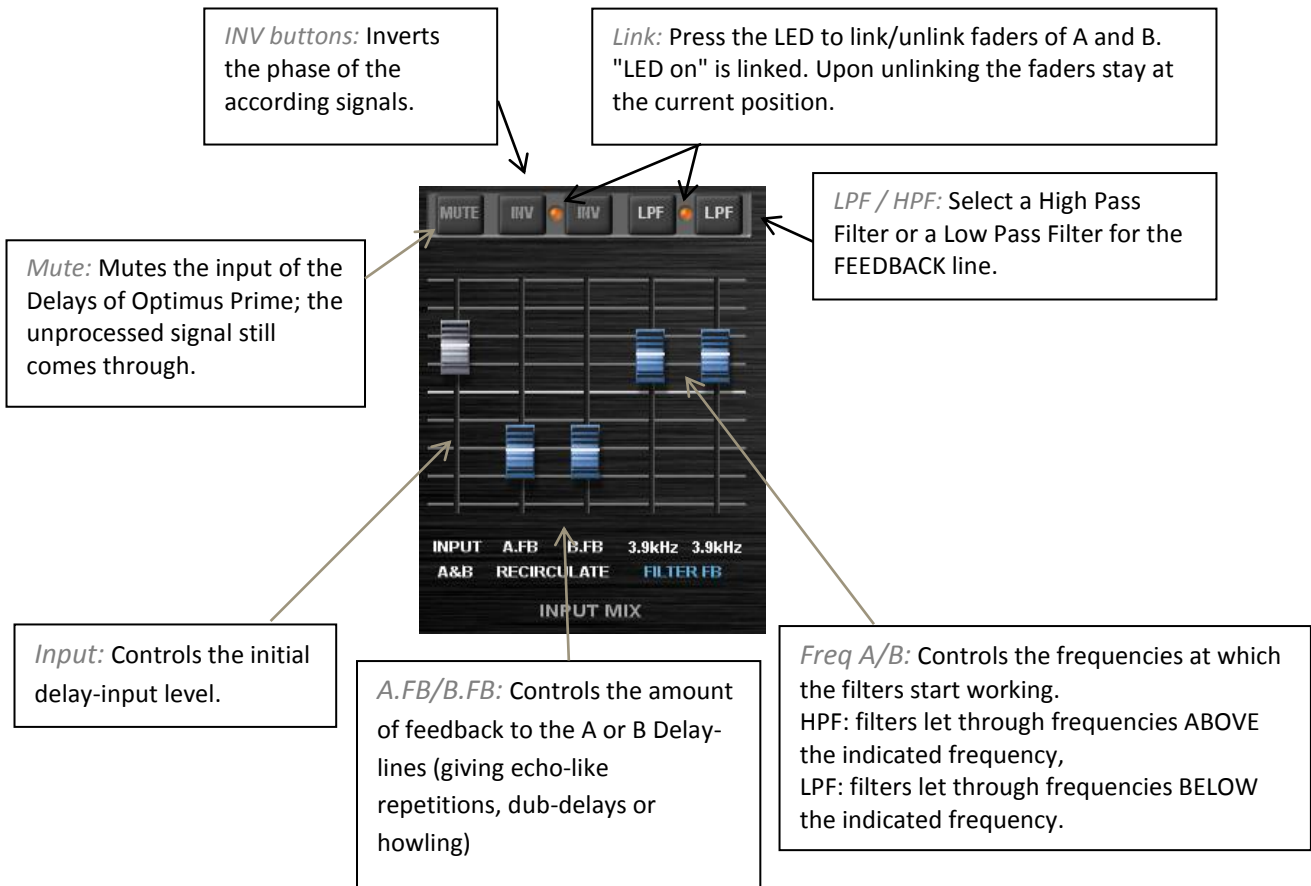


In the setup screen you can simply activate a delay pressing on-screen, or inside the white square below the screen. Two processors can be activated, giving no less than 4 "options" in results. Modulation Delay (0.1ms – 41.7 ms), Long Delay (4.0ms to 2.5 sec) or a combination of the two. Left are two rectangles always visible and if combined on the right also two squares (MOD/LONG on left, S/P on right), giving instant feedback in which mode you're in. (also next page)

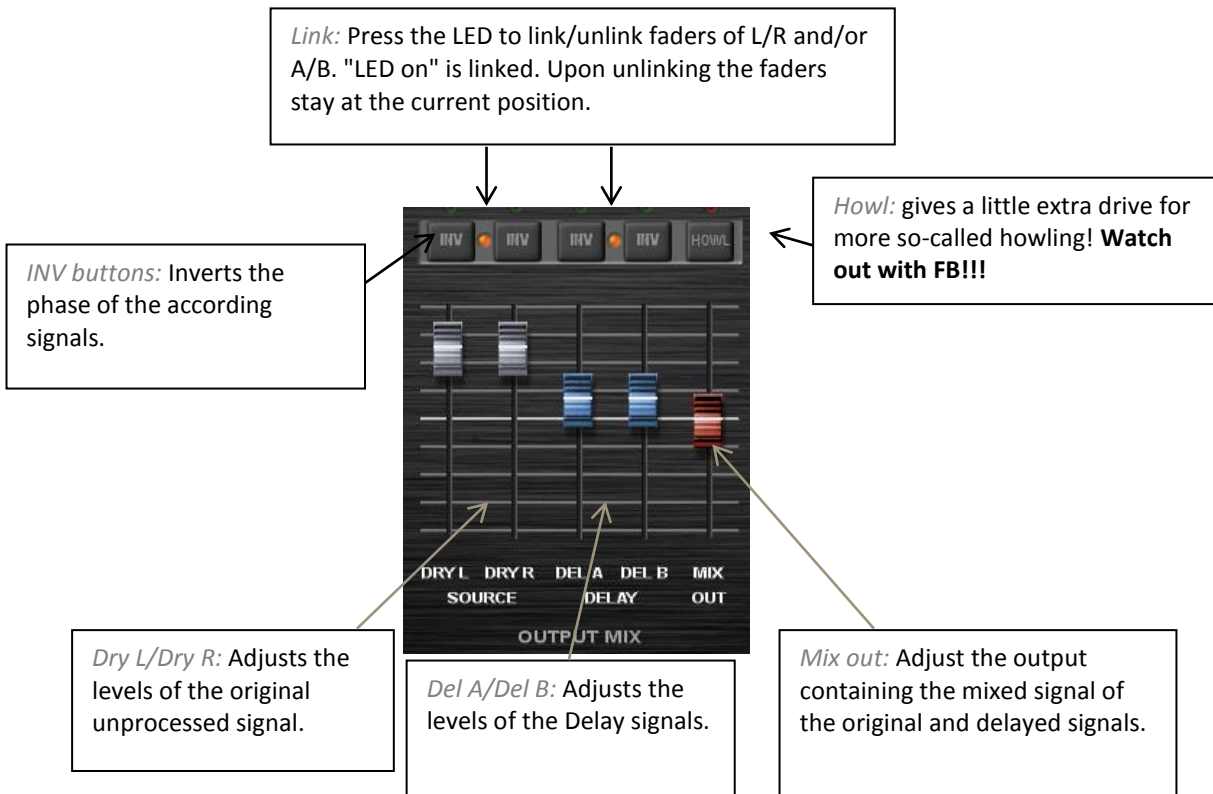
## Metering OUTPUT MIX WINDOW:



## Controllers and indicators / INPUT MIX WINDOW:



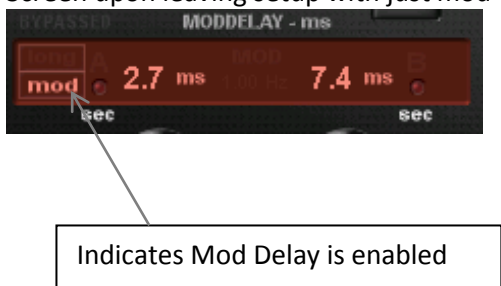
## Controllers and indicators / OUTPUT MIX WINDOW:



## Modulation Delay, used in chorus, flanging, doubling, trebling, "stereo"-making:



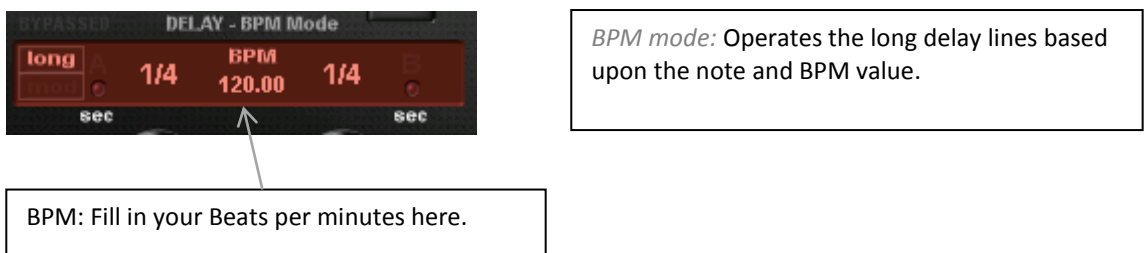
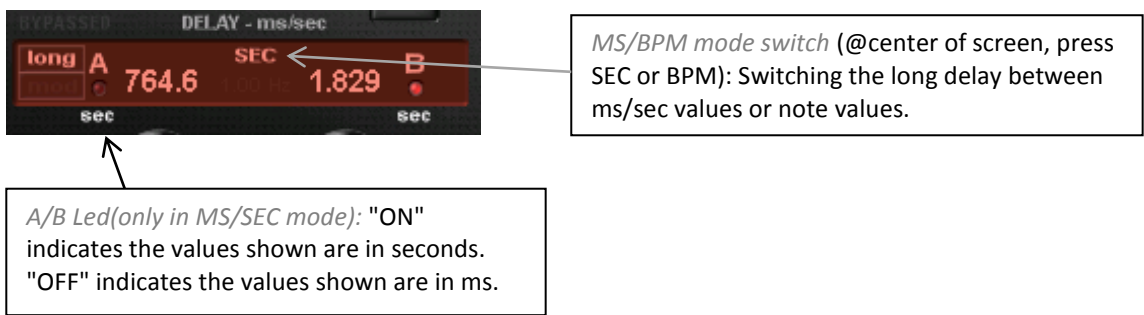
Screen upon leaving setup with just mod-delay activated:



## Long Delay, used for echo / delays, rhythmic delays, dub-echo, etc:



Screens upon leaving setup with Long Delay (or the combination modes) activated:

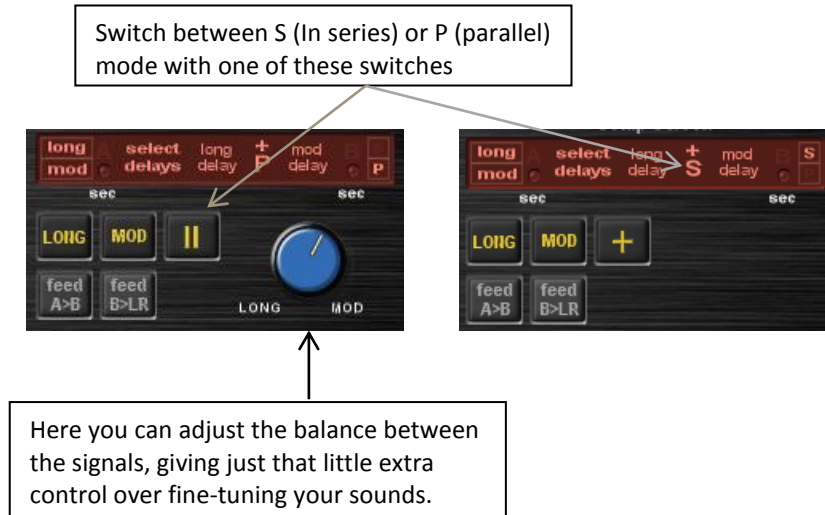


## COMBI S/P: Long delay / Modulation delay in series or parallel.

You can also activate both delays, and then select between two modes: In Series or Parallel.

**Series mode (+S):** First passes the long delay, then the modulation delay; this way you can also use the long delay as a pre-delay to your modulation delay.

**Parallel mode (+P):** Both delays get the same signal fed, and the processed results are mixed together. In parallel mode an additional Blue Pot is shown below the setup screen, for adjusting the balance between the signals, giving just that little extra control over fine-tuning your sounds.



Also in either one of the combination modes:

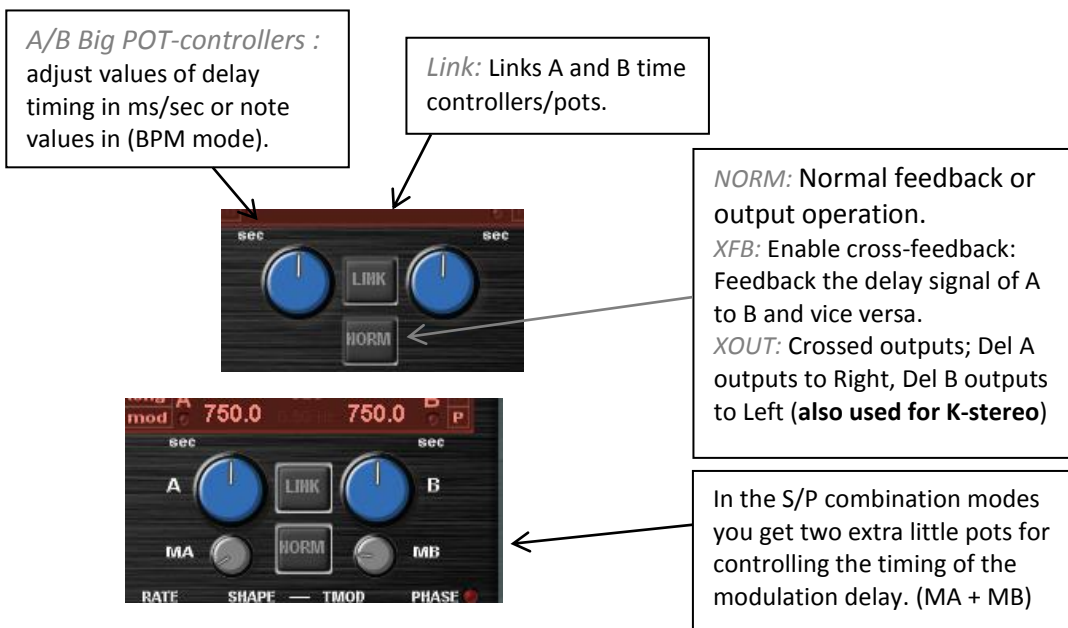
**MS/BPM mode switch** (center of screen, press sec or bpm): Switching the long delay between ms/sec values or note values.

**BPM mode:** Operates the long delay lines based upon the note and BPM value

**A/B Led**(in MS/SEC mode): "ON" indicates the values shown are in seconds. "OFF" indicates the values shown are in ms.

## Controlling the delay times:

Upon leaving the setup screen you'll get at least two big pots and two buttons for controlling the A and B delay time and enable cross-feedback/output of the delay-lines.



## Modulation Parameters:

*Shape*: Morph the modulation between envelope / lfo. Envelope follows the envelope of the incoming signal. (L/R separately)

*TMOD*: Controls the depth of modulation to the delay. (0 / zero is off)

*Rate*: Controls the rate of modulation to the modulation delay.

*LMOD*: modulate volume (level modulation) (0 / zero is off)

Or

Phase: Phase of 2nd LFO for channel B

*x100*: Multiplies the frequency times 100.

*LMOD/Phase*: switch between displaying the phase or LMOD controller-pot

*HOLD*: temporarily bypass/hold LFO/ENV.

*Sin/Sqr/Saw down/saw up/triangle/*: select LFO shape

*Infinite / ∞*: LOOPS a portion of the signal in the memory at the moment of pressing. It sends certain values to different controllers (you will see them jumping) BUT....you can still adjust the values while it is looping, giving endless possibilities in filtered delay sounds.

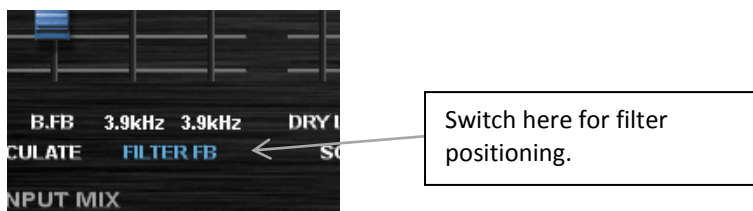
*VCA*: suppress FB while signal is present, and turning the FB up when no input signal is present. This can help in a way that when you're playing the sounds doesn't get cluttered up with long delay tails, but only giving them when you're at the end of "a phrase".



## V2 additional functions:

As of v2.x the dNa-Optimus Prime got additional functions further expanding the possibilities of the plugin.

**Filter on Delay or FB:** You can now choose on which portion the filters work; on the **Delay** itself (works on just the delay input) or on the **Feedback** portion of the Delay (so the filter keeps working on the circulating sound)



**Insert on Delay or FB:** You can now insert any plugin of your choice into the path of Optimus Prime, making it work just on the **Delay** inputsignal, or just on the **Feedback** portion of the sound.



## In setup page there are two more modes from v2.x on:

**Feed A>B:** This function outputs A to Left and to the input of B. This way you can chain the delays to make even longer delays. (this is also often used in the reverb kind of presets, or if you have a mono input you can make the effect just a little bit wider by giving Del B a rather short delay)

**Feed B>LR:** This function can be used with the prior function. <A> doesn't go to L, but only to B, and then B will output to L+R, making the unit outputting a mono sound. (only selectable when Feed A>B is activated!)

